



## PREVENTION OPPORTUNITIES UNDER THE BIG SKY

### Motor Vehicles and Mortality in Montana: Preventable Deaths Take Heavy Toll

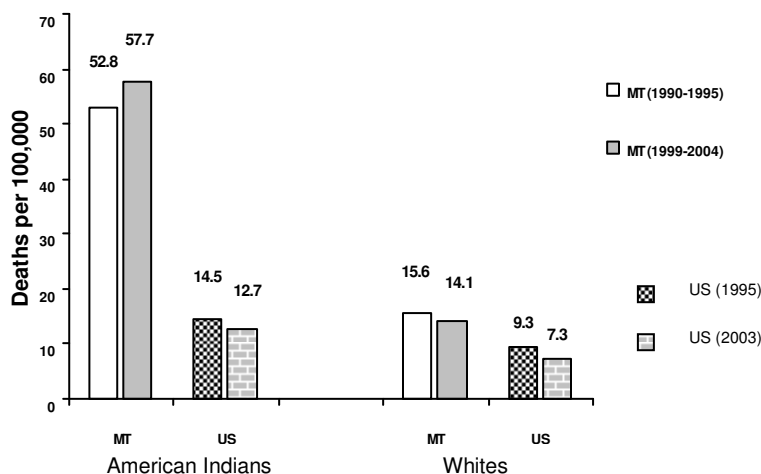
There are some national rankings in which it is better NOT to be in the top 10; motor vehicle fatalities is one of those rankings. Unfortunately, Montana has been going the wrong direction. In 2002 Montana ranked 3<sup>rd</sup> in the country and 2003 “rose” to 2<sup>nd</sup>.<sup>1, 2</sup> While issues such as great rural distances that invite great driving speed may put Montanans at special risk for fatal motor vehicle crashes, important prevention steps that are not being taken could save many lives. This issue of *Montana Public Health* will describe motor vehicle related mortality in Montana and the prevention opportunities that exist. An important public health goal is to push Montana into the bottom 10 in this national ranking.

#### Motor Vehicle Fatalities

Motor vehicle crashes are the leading cause of injury death in the U.S. and in Montana.

- For Montanans age 1 to 44, unintentional injuries are the leading cause of death and motor vehicle crashes are by far the leading cause of these injury deaths.
- From 1999 to 2004, the motor vehicle occupant fatality rate was higher for men (24 per 100,000) than for women (12 per 100,000).
- During this period, 63% of motor vehicle crash fatalities were among persons 0 to 44.
- The motor vehicle occupant death rate for white Montanans is twice the rate for whites in the U.S. (Figure 1).
- The motor vehicle occupant death rate for Montana American Indians is four times higher than that for whites or American Indian/Alaskan Natives elsewhere in the U.S. (Figure 1).

Figure 1: Motor vehicle occupant death rates among American Indians and whites in Montana (1990-1995 and 1999-2004) and in the U.S. (1995 and 2003)

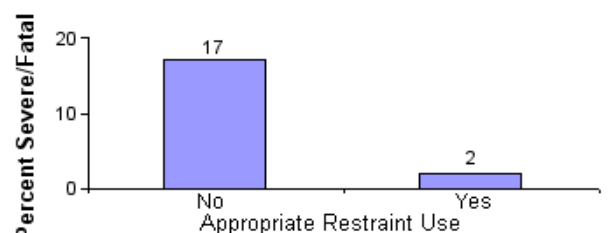


#### Risk Characteristics of Fatal Crashes

The risk of motor vehicle crashes is decreased by adhering to posted speed limits and NOT drinking and driving. The risk of death in a crash is decreased by using seat belts and appropriate child safety seat restraints. Too much speed and alcohol and too little seat belt use kills Montanans.

- MT had the highest alcohol related motor vehicle fatality rate in the U.S. in 2003 for the second straight year.<sup>3</sup>
- In 2003, alcohol or drug-related crashes accounted for 9.4% of all reported traffic crashes and 49% of all fatal crashes. More than 90% of drivers involved in crashes and for whom testing was done had a blood alcohol concentration >0.08g/1000mL.<sup>3</sup>
- Among occupants in vehicle crashes reported in 2005, those who were unrestrained were more than 7 times more likely to sustain a fatal or severe injury than were those who were restrained (Figure 2).<sup>4</sup>
- In 2005, unrestrained motor vehicle occupants who were hospitalized after a crash had two-fold longer length of stay than did hospitalized restrained motor vehicle occupants. Hospital charges were nearly twice as high and insurance (auto and commercial) coverage was significantly lower for the unrestrained motor vehicle occupants.<sup>5</sup>

Figure 2: Severe or fatal injury among motor vehicle occupants for whom seat belt use was recorded, Montana Highway Patrol records, 2005

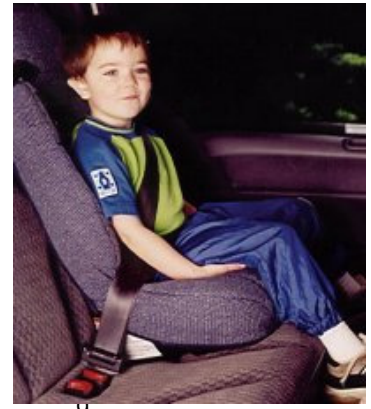


## Prevention Steps

In 2005 in Montana, the legal blood alcohol limit was lowered and a graduated drivers license law was enacted. These steps have been related to lowering motor vehicle mortality rates in other states.<sup>6</sup> Enacting and enforcing a primary seat belt law would save even more lives. In other states this step was associated with a 14% increase in seat belt use and a 7% reduction in motor vehicle fatalities.<sup>7</sup>

Child safety seats need to be used correctly. Infants should ride rear-facing until at least one year AND 20 pounds; children 20 to 40lbs are safest in a car seat with five point internal restraints; children >40lbs should use a booster seat until the lap belt can be worn low and flat on the hips and the shoulder belt can be worn across the shoulder rather than the face/neck (usually at about 4'9" tall and between 8 and 12 years old). For additional information about child seat guidelines, see: <http://www.aap.org/family/carseatguide.htm>

Figure 3: A child correctly secured in a booster seat with the lap / shoulder belt



### Recommendation: Prevention Steps That Reduce Motor Vehicle Crash Fatalities

- Always wear a seat belt or appropriate child restraint when driving.
- Do not drink and drive and do not travel with a driver who has been drinking.
- Health care providers should encourage seat belt and appropriate child safety seat use, and sober driving for all patients and their families.
- Public health and school officials should strengthen efforts to educate young drivers about responsible driving (follow speeds limits, wear seat belts, do not drink and drive).
- A primary seat belt law should be enacted and enforced.

For more information about injury prevention in Montana, contact Bobbi Perkins, Injury Prevention Coordinator at (406) 444-4126 or email at [bperkins@mt.gov](mailto:bperkins@mt.gov).

#### References:

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5. Montana State Trauma Registry. Report of Findings 2005
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